

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 December 2004 (09.12.2004)

PCT

(10) International Publication Number
WO 2004/106567 A1

(51) International Patent Classification?: **C22C 5/06**

(21) International Application Number:
PCT/GB2004/002317

(22) International Filing Date: **1 June 2004 (01.06.2004)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
0312693.5 3 June 2003 (03.06.2003) GB

(71) Applicant (for all designated States except US): **MIDDLESEX SILVER CO. LIMITED (GB/GB)**; Middlesex University, Queensway, Enfield Middlesex EN3 4SF (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **JOHNS, Peter, Gammon (GB/GB)**; 39 Richmond Drive, Watford, Hertfordshire WD1 3BQ (GB).

(74) Agent: **LUCAS, Brian, Ronald**; Lucas & Co., 135 Westhall Road, Warlingham, Surrey CR6 9HJ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **SILVER TERNARY ALLOY**

(57) Abstract: A firestain and tarnish-resistant ternary alloy of silver, copper and germanium contains from more than 93.5 wt% to 95.5 wt% Ag, from 0.5 to 3 wt% Ge and the remainder, apart from incidental ingredients (if any), impurities and grain refiner, copper. In order to further protect an article made from the alloy, it may be surface treated with an alkanethiol, alkyl thioglycolate, dialkyl sulphide or dialkyl disulphide.

WO 2004/106567 A1